REMARKS

In the Office Action dated January 11, 2008, the Examiner rejected claims 22-42. In view of the foregoing amendments and the following remarks, the Applicants respectfully request reconsideration and allowance of all pending claims.

Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claims 22-42 under 35 U.S.C. § 103(a) as obvious over Avery (U.S. Patent No. 4,476,249, hereinafter Avery) in view of Wolf (PCT Application number WO 01/38456, hereinafter Wolf). Applicants respectfully request reconsideration of these rejections in light of following remarks.

The cited references, taken alone or in hypothetical combination, fail to teach or suggest features recited by independent claims 22, 31 and 37.

First, independent claims 22, 31 and 37 recite "A system for co-producing hydrogen and electrical power comprising" (emphasis added). These claims also include clear indications such as "hydrogen delivery system" which indicate that hydrogen is a separate product of the system.

Neither Avery nor Wolf describe or suggest production of hydrogen. Avery specifically includes catalytic converter 14 that converts hydrogen and syngas into methanol. It further describes a methanol storage system, or power generation system based on methanol. There is no mention of storing or producing hydrogen as such.

It is clear that the Examiner is clearly looking only at the parts of the cited reference and reaching at a conclusion. Applicants submit that

Invention must be considered as a whole

The Applicants would like to point out that for a 103 (a) rejection, the "claimed invention must be considered as a whole. *See* MPEP 2141 (II) Basic Consideration That Apply to Obviousness.

When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Second, the independent claims 22, 31 and 37 recite, *inter alia*, "an energy generating system for generating energy from an intermittent renewable energy source"

The cited references, taken alone or in hypothetical combination, fail to teach or suggest "*intermittent* renewable energy source," as recited by independent claim 22. Primary reference, Avery discloses use of Ocean Thermal Energy Conversion (OTEC) for power generation. OTEC, although a renewable energy source, is not intermittent. As identified in paragraph 4, "there is a need in the related art for an effective system to implement a method for maintaining uninterrupted hydrogen-based power production utilizing intermittent renewable energy sources". One of the important aspects of the present invention is that it enables use of intermittent renewable energy sources but maintains uninterrupted power output, *see* paragraph 16. Paragraph 12 describes such intermittent renewable energy sources like wind, solar and tidal energy.

OTEC system is described in Avery at column 2, lines 37-41, as "The OTEC plantships comprise energy producing systems that exploit the difference in temperature between the surface and deep ocean waters to run a Rankine engine or the equivalent and thereby generate electric power". It is well known that this temperature difference is not cyclic or intermittent like other renewable energy sources mentioned above. Even Wolf does not describe the intermittency aspects in either abstract or Fig. 1. The Applicants request for a translation of the Wolf reference to be able to comment on it in its entirety. The arguments presented for Wolf are based only on the English abstract and figure available therein.

Thus neither Avery nor Wolf describe or suggest intermittent renewable energy source, and hence their hypothetical combination cannot suggest this aspect, which is one of the important aspects of current invention.

Third, Avery does not describe a gasification system which is configured to channel at least a portion of synthesis gas generated to power generation system as described in Claim 22. In Avery, the synthesis gas produced goes to a catalytic converter for methanol.

Again, the Examiner is trying to pick and choose from the references and not really considering them as a whole.

Fourth, the present independent claim 22 recites, *inter alia*, "oxygen delivery system further configured to channel at least a portion of said oxygen to a *biomass gasification* system"

As agreed by the Examiner on page 3 of the office action, Avery discloses system with gasification of coke. It does not indicate biomass gasification. The Examiner has sought to combine Avery with Wolf. Wolf describes gasification of coke that is obtained

from biomass. The Examiner argues that combination of Avery and Wolf should anticipate system described in current invention.

The Applicants submit that there is a difference between coal and biomass gasification. The Applicants have described use of biomass instead of coal / coke because biomass generates more hydrogen rich gas than coal. See e.g. "Co-pyrolysis of biomass and coal in a free fall reactor", Fuel, Volume 86, Issue 3, February 2007, Pages 353-359 mentions - Under the same pyrolysis condition, the H2 yield (wt.%, daf) generated from biomass is about 5–16 times as high as those generated from coal." This is not mentioned in the patent application, because the focus of patent application was not to compare biomass and other feedstocks for hydrogen production.

For at least these reasons among others the cited references cannot anticipate independent claims 22, 31 and 37 and claims depending therefrom. Hence the Applicants request withdrawal of these rejections and allowance of claims 22-42.

Conclusion

The Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

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